# Men's influence on realization of women's fertility preference in Ghana 

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## Extended Abstract

## Background

Both men and women are important players in the childbearing process, however, most fertility studies focus on women and the characteristics that impact on their reproduction life. This study seeks to investigate the influence of men's socio-demographic factors women actualizing their fertility preference at the end of their reproductive lives.

Understanding the gap differentials between fertility preferences and actual fertility of any group is relevant in implementing intervention programmes. Research on the gap between fertility preference and actual fertility is uncommon in developing countries, especially sub-Saharan Africa, where it is needed most (Ibisomi, Gyimah, Muindi, \& Adjei, 2011; Muhoza, Broekhuis, \& Hooimeijer, 2014). Often, studies have focused on factors accounting for high fertility preference and actual fertility among women (Agyei-mensah \& Onuoha, 2014; Kodzi, Johnson, \& Casterline, 2010; Lotfi, Naeeni, Rezaei, Farid, \& Tizvir, 2017). However, studies have shown that subSaharan African men often want larger families than their spouses (Bankole \& Singh, 1998; Shapiro \& Tenikue, 2017).

In the case of Ghana, like other sub-Saharan African countries, information on the fertility preference and actual fertility differences (herein referred to as fertility gap) is limited. Results of these studies have focused much on how women's characteristics influence their fertility gap with less emphasis on the role of men. Nevertheless, it is curious to know that men's dominance over women's reproductive decisions play vital role in reducing fertility preference and actual fertility (Caldwell, 2009; Caldwell, Orubuloye, \& Caldwell, 2016; Derose, Wu, \& Dodoo, 2010). The impact of men's influence on fertility gap among their spouses especially those who have ended their reproductive lives has not been explored in the African context. This study seeks to investigate the impact the impact, if any, of men education and fertility preferences on their spouses' fertility gap in Ghana.

## Objective/Aim

The study seeks to describe fertility gap of women who have ended their reproductive life cycle; examine the associations if any between partner's education and fertility preference and fertility gap among women and; investigate how partner's socio-demographic characteristics moderates women's fertility gap above their own individual characteristics.

## Data and Methods

The study relies on a nationally representative sub-sample of currently married women aged 45 to 49 years from the 2014 round of the Ghana Demographic and Health Survey (GDHS). The GDHS collects information on fertility, family planning, infant and child mortality, maternal and child health, and nutrition related topics of interest. The sample was restricted to currently married women age 45-49 years with at least one live birth. Of this sample, women do not want any more children or were infecund or sterile and gave numeric response to question on their preferred fertility was selected.

The outcome variable, fertility gap, was measured as the difference between a woman's fertility preference and children ever born. This yielded three outcomes; negative (underachieved), zero (achieved) and positive (overachieved) values. The explanatory variables modelled include partner's fertility preference, partner's education, child loss experience, place of residence, education of respondent, age at first birth, number of marital unions and ever use modern contraception. The study employs multinomial logistic regression models to examine how partner's fertility preference and education of respondents have any influence on women's fertility gap controlling for individual background characteristics.

## Results

The results showed that of the 474 sub-sample of women aged between 45-49 years, a little over one-third (34.5\%) had underachieved fertility, a little over one-in-four ( $25.9 \%$ ) had achieved fertility and nearly two-out of five women (39.6\%) had overachieved their fertility preference (Figure 1). A little over half (54.5\%) of respondents are urban resident. About six-in-ten (61.6\%)
of women had all their children surviving child death. A little over one-fourth ( $28.8 \%$ ) of respondent had their first birth when less than 18 years. A substantial proportion of women (61.6\%) had been in one marital union. More than half (56.4\%) of the women had never used modern contraceptives. The mean years of education of men (7.1) is higher than women (4.6). A higher proportion of women had same fertility preference with their partner ( $42.1 \%$ ) compared to those having different fertility preference with their partners (Table 1).

Figure 1: Percent distribution of fertility gap among women with completed fertility in Ghana, 2014


Source: Computed by authors from GDHS 2014

Table 1: Individual and partner characteristics of respondents

| Characteristics | 2014 (N=474) |  |
| :--- | :--- | :--- |
| Place of residence | n | $\%$ |
| Urban | 216 | 45.6 |
| Rural | 258 | 54.4 |
| Child Loss Experience |  |  |
| All children survived | 292 | 61.6 |
| One or more infant deaths | 91 | 19.2 |
| One or more child deaths | 57 | 12.1 |
| Both infant and child deaths | 34 | 7.1 |
| Age at first birth |  |  |
| < 18 years | 137 | 28.8 |
| 18-20 years | 142 | 30.0 |
| 21 years above | 195 | 41.2 |
| Number of Marital Unions |  |  |
| Once | 292 | 61.6 |


| Two or more unions | 182 | 38.4 |
| :---: | :---: | :---: |
| Education of respondent |  |  |
| Range | 0.0-17.0 |  |
| Mean | 4.6 |  |
| Ever use of modern contraceptive |  |  |
| Yes | 81 | 44.6 |
| No | 393 | 56.4 |
| Partner's Education (in years) |  |  |
| Range | 0.0-18.0 |  |
| Mean | 7.1 |  |
| Men's preferred fertility |  |  |
| Both want same | 200 | 42.1 |
| Husband wants more | 122 | 25.8 |
| Husband wants fewer | 36 | 7.5 |
| Don't know | 116 | 24.5 |

Source: Computed by authors from GDHS 2014

## Bivariate and Multivariate Results

The bivariate analyses showed statistically significant associations between partner fertility preference, child loss experience, age at first birth, number of unions, modern contraceptive use and fertility gap (see Table 2 in Appendix). Multivariate analyses shows child loss experience, age at first birth and number of marital union as significant correlates of fertility gap. In addition, the multivariate analyses reveal that partner's fertility preference determines both underachieved and achieved fertility of women (see Table 3 in Appendix) after controlling for other known covariates.

## Discussion

The finding on fertility gap in Ghana is similar to pattern observed in other studies conducted in sub-Saharan Africa (Harper, 2018; Muhoza et al., 2014). If reproductive decisions are independently formed, it is expected that individual characteristics of women should predict their fertility gap but not their partners. However, given men's dominance over reproductive decisions of women, the finding in the multivariate analyses about the influence of men's fertility preference on women's actual fertility is not surprising as men have been found in sub-Saharan Africa to have
greater influence on fertility preference and actual fertility of women (Derose et al., 2010; Dodoo \& Landewijk, 1996).

## Conclusion

The role of men in women's actual fertility is key to identifying intervention programmes for population management. Interventions on limiting high fertility should not only focus on women but also consider men since reproductive decisions are jointly formed by both couples with men having greater power and influence.

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## Appendix

Table 2 Percentage of women by fertility gap in Ghana, 2014

| Characteristics | Underachieved <br> Fertility | Achieved <br> Fertility | Overachieved <br> Fertility |
| :--- | :---: | :---: | :---: |
| Child loss experience | 39.7 | $\chi^{2}=19.760^{* *}$ |  |
| All children survived | 34.1 | 25.3 | 34.9 |
| One or more infant deaths | 22.4 | 18.7 | 47.3 |
| One or more child deaths | 11.8 | 36.2 | 41.4 |
| Infant and child deaths |  | 35.3 | 52.9 |
| Socio-demographic characteristics | 5.0 | 4.8 |  |
| Education |  | $\mathrm{F}(1.613)$ | 4.2 |
| (in years) | 38.9 | $\chi^{2}=3.235$ |  |
| Place of residence | 24.1 | 37.0 |  |
| Urban | 31.0 | 27.5 | 41.5 |
| Rural |  |  |  |
| Reproductive history | 26.3 | $\chi^{2}=16.769^{* *}$ | 20.4 |
| Age at first birth | 34.5 | 29.6 | 53.3 |
| < 18 years | 40.5 | 27.2 | 35.9 |
| 18-20 years |  | $\chi^{2}=12.618^{* *}$ | 32.3 |
| 21 years above |  |  |  |


| Once | 33.1 | 31.4 | 35.5 |
| :--- | :---: | :---: | :---: |
| Two or more unions | 36.8 | 17.0 | 46.2 |
| Birth Control Method |  |  |  |
| Ever use of modern contraceptives |  | $\chi^{2}=7.108^{*}$ |  |
| No | 37.3 | 28.4 | 34.3 |
| Yes | 30.9 | 22.7 | 46.4 |
| Husband's Characteristics |  |  |  |
| Husband's education |  | 7.1 | 7.2 |
| (in years) |  | $\mathrm{F}(0.024)$ |  |
| Husband fertility preference | 30.5 | $\chi^{2}=46.123^{* * *}$ |  |
| Both want same | 34.2 | 22.1 | 35.5 |
| Partner wants more | 77.8 | 11.1 | 51.6 |
| Partner wants fewer | 36.8 | 20.5 | 11.1 |
| Don't know |  |  | 42.7 |

Source: Computed by author using the GDHS 2014; * $\mathrm{p}<.05 ;{ }^{* *} \mathrm{p}<.01 ;{ }^{* * *} \mathrm{p}<.001$

Table 3: Results of multinomial regression of fertility gap in Ghana, 2014

| Characteristics | Underachieved vs Overachieved Fertility |  |  | Achieved vs Overachieved Fertility |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Child Loss Experience | SE | RRR | 95\% CI | SE | RRR | $\mathbf{9 5 \%}$ CI |
| All children survived (RC) |  |  |  |  |  |  |
| One or more infant deaths | 0.307 | 0.517 | 0.283-0.945* | 0.352 | 0.445 | 0.223-0.887* |
| One or more child deaths | 0.425 | 0.407 | 0.177-0.936* | 0.385 | 1.283 | 0.603-2.730 |
| Infant and child deaths | 0.646 | 0.253 | 0.071-0.896* | 0.471 | 1.163 | 0.463-2.925 |
| Socio-demographic characteristics Education (in years) | 0.051 | 1.019 | 0.923-1.126 | 0.048 | 1.039 | 0.947-1.141 |
| Place of residence Rural (RC) |  |  |  |  |  |  |
| Urban | 0.270 | 1.267 | 0.747-2.149 | 0.279 | 1.115 | 0.646-1.926 |
| Reproductive history |  |  |  |  |  |  |
| Age at first birth <br> < 18 years (RC) |  |  |  |  |  |  |
| 18-20 years | 0.330 | 1.811 | 0.948-3.460 | 0.341 | 1.959 | 1.005-3.818* |
| 21 years above | 0.321 | 2.487 | 1.327-4.663** | 0.339 | 1.761 | 0.906-3.424 |
| Marital history Number of unions Once (RC) |  |  |  |  |  |  |
| Two or more unions | 0.264 | 1.215 | 0.724-2.039 | 0.290 | 0.483 | 0.273-0.853* |
| Birth Control Method |  |  |  |  |  |  |
| Ever use of modern contraceptives No (RC) |  |  |  |  |  |  |
| Yes | 0.254 | 0.608 | 0.370-1.000 | 0.261 | 0.617 | 0.370-1.030 |


| Husband's Characteristics |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Husband's education | 0.045 | 0.941 | 0.862-1.028 | 0.044 | 0.931 | 0.853-1.016 |
| Husband fertility preference |  |  |  |  |  |  |
| Both want same (RC) |  |  |  |  |  |  |
| Partner wants more | 0.519 | 0.285 | 0.103-.787* | 0.527 | 0.396 | 0.141-1.115 |
| Partner wants fewer | 1.052 | 2.536 | 0.322-19.955 | 1.272 | 0.710 | 0.059-8.591 |
| Don't know | 0.532 | 0.396 | 0.140-1.125 | 0.629 | 0.187 | 0.054-0.642** |
| Husband's fertility preference $\times$ partner's education |  |  |  |  |  |  |
| Both want same $\times$ partner's education$(\mathrm{RC})$ |  |  |  |  |  |  |
| Partner wants more $\times$ partner's education | 0.071 | 0.983 | 0.856-1.130 | 0.071 | 1.033 | 0.899-1.186 |
| Partner wants fewer $\times$ partner's education | 0.130 | 1.148 | 0.890-1.481 | 0.173 | 0.914 | 0.652-1.282 |
| Don't know $\times$ partner's education | 0.065 | 1.169 | 1.029-1.329* | 0.072 | 1.145 | 0.994-1.319 |
| Husband's fertility preference $\times$ education |  |  |  |  |  |  |
| Both want same $\times$ education (RC) |  |  |  |  |  |  |
| Partner wants more $\times$ education | 0.075 | 1.150 | 0.992-1.334 | 0.079 | 0.976 | 0.836-1.141 |
| Partner wants fewer $\times$ education | 0.187 | 1.103 | 0.765-1.591 | 0.253 | 1.234 | 0.752-2.025 |
| Don't know $\times$ education | 0.080 | 0.996 | 0.852-1.165 | 0.086 | 1.030 | 0.817-1.218 |
| Sample Size |  |  |  | 474 |  |  |
| Log Likelihood |  |  |  | 877.222 |  |  |
| Pseudo R ${ }^{2}$ |  |  |  | 0.285 |  |  |

